

# The Builder.

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SATURDAY, FEBRUARY 28, 1852.



**SIR CHARLES BARRY** thinks we did him injustice by the note appended to Mr. Jeaker's letter last week, though it simply repeated what Lord

Seymour had stated was the cost of ventilating and warming the New Houses of Parliament. We have since then looked into the matter for ourselves, according to promise, and on the information we have obtained are able to say that the statement in question gives an erroneous view of the expenditure, and is calculated greatly to mislead. The estimates for warming and ventilating and smoke arrangements, as supplied to Parliament so long ago as August 1850, amount, it is true, to 208,000*l.*; but these include 85,000*l.* for extra works in fire-proofing. Of this about 161,000*l.* have been already spent, and, as we are told, should be divided thus:—Spent by Dr. Reid, according to Lord Seymour, on the House of Commons and apartments connected with it, 57,800*l.*; fire-proofing enforced by Dr. Reid's arrangements in the first instance, say 75,000*l.*; and the sum spent by the architect on the House of Peers, and all the other parts already warmed and ventilated with the exception of the House of Commons, 28,000*l.* The architect's estimates for the latter amount to about 43,000*l.* so that we must conclude that other works remain to be executed.

Putting things at the best, still there has been a vast expenditure of money unnecessarily. A grievous error was committed in the first instance by giving Dr. Reid control over the architect. To say that the architect is not to be the "chief workman" is a positive contradiction in terms: and we do most strenuously protest, as we have ever done, against the setting up of such an *imperium in imperio* as was attempted here, and which has produced such unsatisfactory and costly results.

Several correspondents have addressed us lamenting that injury will be done to the sanitary cause by the statements, if not the facts, connected with the ventilation here, but as they mostly advocate other systems of ventilation in which they are interested, we do not print their letters. One says that—

"In a large collegiate establishment accommodating 1,000 pupils besides professors, porters, &c.; and containing ten large lecture-rooms and a library as large as a church, where but moderate structural preparation had been made; 10,000 cubic feet of fresh air per minute are supplied at a temperature of 80 deg. by a steam engine, provided with means of regulation as to quantity and temperature, at an initial cost below 750*l.* including builders' work, and at a permanent expense for attendance and fuel, of about 100*l.* per annum: and that in a much larger college containing fifty-two large school-rooms, and an immense theatre for lectures, the structure offering facilities by which steam power was not required, the initial cost was below 1,400*l.* and the annual cost of fuel and management about 150*l.*"

Nor do we see any reason why the statement should not be perfectly true.

The means provided for the ventilation of the House of Commons, are most elaborate, and in some parts, we say advisedly, perfectly useless. We were in the House on the occa-

sion of the declaration of the change of ministers (a change by the way which has put Lord Seymour out of the Office of Works, and Lord John Manners in), and it seemed to us that there was no control exercised over the atmosphere of the House. The supply of air was inadequate, and the results, as a matter of course, are innumerable draughts. It seemed to be vacuum ventilation, rather than *plenum*. This may be accounted for by the fact that the engine intended to drive the fan by which the air is to be supplied, is not at work, being found too noisy for the purpose. We must wait, therefore, before we come to a conclusive opinion as to the efficiency or otherwise of the present arrangements. The position in which air is brought in, at the feet of all the members, does not seem to us the best: indeed, our present impressions are against it. If warm, the air will be found disagreeable; when cold, and even tempered air in rapid motion produces the effect of cold, it will be dangerous.

It will startle some, by the way, to find that the cubical contents of the air-chambers, shafts, and flues used by Dr. Reid to ventilate, are actually larger than the contents of the House of Commons, lobbies, and corridors ventilated,—the first being 366,000 cubic feet, the second 386,000 feet. A section of the House and surrounding chambers above and below would show a very small kernel in a very thick rind. The "ventilated" gas-lights give an immense amount of heat, and, in hot weather, we are disposed to think, will be found unbearable. The mass of metal composing the chandeliers becomes a permanently heating surface, which radiates on all sides.

Returning to those parts of the building which have been warmed and ventilated under the architect's direction (by Mr. Jeaker), some of our readers will perhaps like to know the mode which has been adopted. In the first place, then, we find a set of steam-boilers, erected in a central position, which keep up the temperature of a series of heating surfaces placed at intervals beneath the entire area to be warmed. A supply of fresh air is taken from the Victoria Tower, and a current through the various channels is produced by an enormous fan, worked by steam power, and capable of propelling, they say, 300,000 cubic feet of air per minute through the building. The air thus brought in, is tempered in a large central air-chamber, filled with upright heated pipes, from which it passes to all parts through channels, receiving in its progress such additional temperature, from other heating surfaces, as may be required for that particular apartment, or portion of the building to which it is being conveyed. Each supply is under separate control, both in volume and temperature: arrangements are also made for cleansing the air of any impurities in its progress through the channels, and a cooling apparatus is to be introduced for reducing the temperature of the admitted air in summer.

In the House of Lords specially, in order to render the ventilation as perfect as possible, under all the changes to which it is subject, means are provided for admitting the pure air, and extracting the vitiated, both at the upper and lower part of the apartment, and a sufficient power is said to exist to change the entire atmosphere of the House in a few minutes, either by admitting and extracting the air at the upper or lower part, or at both. The object sought is to maintain a *plenum*, in order

to prevent currents into the House from without, by making all openings outlets for air instead of inlets. Two 10-horse engines are employed. The answers to our inquiries in the libraries and other parts as to the results were satisfactory. The fan, of which we have spoken, is made of thin sheet-iron, and is 22 feet in diameter. Its effect is such when at work, making nearly 100 revolutions in a minute, that we expected when exposed to it to find our own disjointed members whisked against their will to join the members of the Upper House. The amount of heating surface provided by the boilers may be judged of when we say there are six miles of pipes proceeding from them. The smoking-room (whereof the walls are covered with coloured tiles to a certain height), is cleared by an exhausting shaft with a separate small furnace. A bell went while we were here, and we learnt that throughout the building there are bells to announce the approach of a "division," rung simultaneously by electricity:—a "junction" is effected just previous to a division.

Of matters æsthetic we will say but little just now. The stained-glass windows, in the House of Commons, by Messrs. Hardman, are not good; they are very far inferior to other works by the same firm. They are badly painted, the supporters especially (Mr. Hume's "Red Lions," and sea-horses), and contrast unfavourably even with windows of the same design in the central hall. A heraldic lion, or sea-horse is conventional, but need not be a caricature. Some of our readers will remember the story of the herald-painter, who was taken to the Zoological Gardens, previously to emblazoning some arms, to see the lion there. "Do you call that thing a lion," said he, contemptuously, when the king of beasts stood before him;—"that a lion? If I couldn't paint a better, I'd eat him."

Mr. Bell's statue of Lord Falkland, in St. Stephen's Hall, is an admirable work, full of noble feeling. It has worthy companions, in Clarendon, by Mr. Calder Marshall, now R.A.; and Hampden, by Mr. Foley.

In the Queen's Robing-room Mr. Dyce has completed one of the series of frescoes, which he is commissioned to execute there. According to an assistant in the room, the subject is "The Spirit of Chivalry," but this, we think, must be an error. It represents a male figure being taken up into the sky in his chair; other figures in the heavens are awaiting him. The clouds supporting the figure in the chair are more like a series of Brobdingnagian potatoes or Jerusalem artichokes. An armed man on the left side of the picture would evidently fall, but for the point of his shield, which touches the ground, and the draped female figure in the man's arms on the right side is but a bundle of clothes without a body in it, or a *Marionette*. It pains us to be forced to speak thus of the work of so accomplished an artist as Mr. Dyce, but the matter is too important to be blinked: he has several others to execute, and it is necessary that he should hear the truth. The motive of the picture is as unsatisfactory as the execution: it would seem to have been cut out of a book of Romish miracles, and is wholly unsuited to the time and the place.

**NEW WORKHOUSE AT ORMSKIRK.**—At a special meeting of the board of guardians, the report for the building of a new workhouse, &c. has been unanimously adopted.